

REMARKS

The Amendments

The claims are amended to correct a minor informality and put the claims in a form more customary to U.S. practice. Support for the new dependent claims is found, for example, on page 4-6 of the specification. The amendments do not narrow the scope of the claims and/or were not made for reasons related to patentability. The amendments should not be interpreted as an acquiescence to any objection or rejection made in this application.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

The Restriction Requirement

Applicants maintain their previous traversal of the restriction requirement to the extent that a full restriction – rather than merely an election pursuant to Markush practice – was intended. The discussion in the paragraph bridging pages 5-6 and the following full paragraph on page 6 of the Office Action appears to indicate that the election was considered an election pursuant to Markush practice and that additional species will be searched if the elected species (i.e., R¹ is thienyl) is found allowable. If the election is being treated in this manner under Markush practice, applicants withdraw their traversal. It is believed it is proper to treat the election in this manner because, as the Office Action states, claim 1 is a proper Markush claim.

Regarding the process of preparation claims 2-11, applicants respectfully submit that, if the Markush compound claim 1 is found allowable, the process of preparation claims should be rejoined with such allowance. Per In re Ochiai, 37 USPQ2d 1127 (Fed. Cir. 1995), In re Brouwer, 37 USPQ2d 1663 (Fed. Cir. 1996) and the Commissioner's comments thereon in 1184 TMOG 86, March 26, 1996, the novelty and nonobviousness of a process of preparing a compound inevitably follows from a finding of novelty and nonobviousness of the compound.

The Rejection under 35 U.S.C. §103

The rejection of claims 1, 12 and 13 under 35 U.S.C. §103, as being obvious over Ohkuma (Org.Let., 2000) and Deeter (Tet.Let., 1990) is respectfully traversed.

Ohkuma and Deeter each disclose compounds which are tertiary amines, i.e., the amino group is substituted by three non-hydrogen groups. In each case, the amino atom in the reference compounds is bonded to the chain containing the thienyl group and to two alkyl groups, i.e., dialkyl substituted. This is in contrast to the compounds of applicants' formula I, which are "monoalkylaminoketones" wherein the amino group is bonded to one hydrogen atom, only one alkyl group and the heterocycle-containing chain.

The distinction of the reference compounds is noted in the Office Action, however, it is alleged that it would have been obvious to interchange secondary and tertiary amines and replace one of the alkyl groups of the reference compounds with hydrogen. The Ex parte Bluestone, 135 USPQ 199 (POBA 1961), decision is cited as support. Although older case law can certainly still have validity, it is respectfully submitted that this Board of Appeals decision has been overturned by later CCPA and CAFC case law. To the extent Bluestone stands for the proposition that a secondary amine is per se obvious over its corresponding tertiary amine, that proposition is no longer supported by the law. Decisions such as In re Jones, 21 USPQ 2d 1941, 1943 (Fed. Cir. 1992), and In re Grabiak, 769 F.2d 729, 226 USPQ 870,872 (Fed. Cir. 1985), have held that structural similarity alone is not sufficient to support obviousness and that generalization is to be avoided insofar as specific structures are alleged to be per se prima facie obvious one from the other. In any event, there must always be a suggestion or motivation to one of ordinary skill in the art to modify a prior art reference as a basis for an obviousness rejection under 35 U.S.C. §103.

In the instant fact situation, the case law is even more clear. Here, the cited references are merely literature articles giving organic synthesis mechanisms. No utility for the compounds produced or used in these methods is provided other than as a synthetic route. In this situation the case law is clear. Where a reference discloses no utility for compounds disclosed therein, the reference provides no motivation to one of ordinary skill in the art to modify such compounds, even to compounds which are allegedly structurally similar; see, e.g., In re Stemniski, 170 USPQ 343 (CCPA 1971). As the court rhetorically asked in Stemniski, at 347:

"Where the prior art reference neither discloses nor suggests a utility for certain described compounds, why should it be said that a reference makes obvious to one of ordinary skill in the art an isomer, homolog or analog of related structure, when that mythical, but intensely practical, person knows of no 'practical' reason to make the reference compounds, much less any structurally related compounds?"

For the above reasons, it is urged that the case law dictates that the rejection under 35 U.S.C. §103 here should be withdrawn for lack of motivation to make the necessary modification.

As an additional reason for supporting nonobviousness, the compounds of applicants' invention have been discovered to be particularly useful as intermediates in preparing monoaminoalcohols. They would be significantly advantageous over the respective dialkylaminoketones in such preparation. Starting from dialkylaminoketones to prepare monoaminoalcohols would be particularly cumbersome since a complex dealkylation step would be required. This step would have high potential for forming toxic or carcinogenic by-products, such as methyl chloride. The monoalkylaminoketones of applicants' invention, to the contrary, can be used in a more direct and efficient synthesis, e.g., by simple hydrogenation, to prepare monoaminoalcohols. Clearly, such advantage could not have been suggested or considered from the reference teachings since they relate merely to organic synthesis mechanisms without any end use contemplated.

For the above reasons, it is urged that the claimed invention is not rendered obvious to one of ordinary skill in the art by the teachings of either of the prior art references or their combination. Thus, the rejection under 35 U.S.C. §103 should be withdrawn.


The Claim Objection

The objection to claim 1 is believed to be rendered moot by the corrective amendment made thereto.

It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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